

REMARKS

Claims 1-16 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claim 1 has been amended to clarify the various portions of the last paragraph thereof and to more clearly claim the subject invention. Claim 13 has also been amended to correct an apparent typographical error. In view of the amendments made to claim 1, Applicants submit that the rejection under 35 U.S.C. § 112 has been overcome.

Claim 1 was also rejected under 35 U.S.C. § 102(b) as being anticipated by Budzich (U.S. Pat. No. 4,200,118). Applicants respectfully submit that Claim 1, as amended, clearly distinguishes over the Budzich reference. Budzich teaches (*e.g.*, in Col. 3, lines 24-38) that the valve spool 34 of the control valve 12 is movable in either direction from a center position to an operative position. In each of the operative positions, one of the actuator chambers 56, 57 is connected to an inlet chamber 21 (and, therefore, with the pump 10) and the other actuator chamber 56, 57 is connected to a reservoir 16. In each of these operative positions, the actuator chambers 56, 57 are not interconnected with each other. Since both valve spools 34 disclosed in Budzich are the same, the valve spool 34 of control valve 13 functions in the same way.

Budzich further teaches (*e.g.*, in Col. 3, lines 39-48) that when the spool 34 of the control valve 13 is “moved upward all the way” -- *i.e.*, into an extreme “regeneration position” -- the actuator chambers and the pump are all interconnected together. The same would also be true of the valve spool 34 of the control valve 12. Thus, Budzich teaches that movement, in any direction, of a valve spool 34 from its respective center position will cause the spool 34 to move into an operative position, at which one of the actuator chambers 56, 57 is connected to the inlet chamber (pump) and the other actuator chamber is connected to the reservoir, and at which the actuator chambers 56, 57 are not interconnected with each other. Moreover, further movement of the spool 34 “all the way” into a final extreme “regeneration position” is required in order for the spool to provide a regeneration function.

Claim 1, as amended, recites that “the second outlet port of the first directional control valve is in communication with the supply port thereof and with both the first outlet port thereof and with a selected one of the first and second outlet ports of the second directional control valve such that pressure equalization is established between both ends of

the first fluid cylinder and the selected one of the first and second outlet ports of the second directional control valve *in response to the first directional control valve being moved from its center position towards its second operative position and the second directional control valve being moved from its center position towards one of its operative positions.*” Thus, the arrangement of the present application establishes pressure equalization in response to the first directional control valve being moved from its center position towards its second operative position and the second directional control valve being moved from its center position towards one of its operative positions. It is respectfully submitted that this relationship is clearly not taught in the Budzich reference. In Budzich, interconnection of the actuator chambers 56, 57 of an actuator 15 occurs only when the corresponding valve spool 34 is “moved upward all the way” into its extreme “regeneration position”. Thus, in Budzich, pressure equalization is not “established between both ends of a first fluid cylinder and a selected one of first and second outlet ports of a second directional control valve *in response to a first directional control valve being moved from its center position towards its second operative position and the second directional control valve being moved from its center position towards one of its operative positions,*” as recited in amended claim 1. Moreover, Budzich teaches a regeneration function only when one of the valve spools 34 is in a neutral or center position and the other valve spool 34 is “moved upward all the way” into its extreme “regeneration position” (see *e.g.*, Budzich, Col. 3, lines 39-48). Thus, Applicants respectfully submit that Budzich does not teach the invention recited in claim 1 of the present application, as amended.

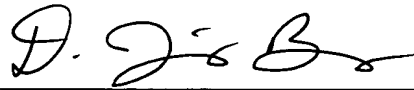
Claims 4-8 were rejected under 35 U.S.C. § 103 as being unpatentable over Budzich in view of Johnson (U.S. Pat. No. 4,204,459). Applicants respectfully submit, however, that Johnson does not remedy the deficiencies of Budzich set forth above with respect to claim 1. Moreover, Applicants respectfully submit that when taken in combination with the claim or claims from which they depend, including amended claim 1, each of the claims 4-8 are allowable over the art of record taken singularly or in combination for at least the reasons set forth above with respect to claim 1. Moreover, Applicants further submit that for all of the reasons set forth above, claims 1 and 2-16, which depend from claim 1, distinguish over the art of record.

It is respectfully urged that all of the pending claims of the subject application, as amended, are in condition for allowance, and allowance of the claims at issue is earnestly requested.

FEES

No fees are believed to be incurred by this submission. However, should any fees be deemed necessary, including petition and fee for extension(s) of time, the Commissioner is requested to treat this as such petition, and is hereby authorized to charge any fees due to Caterpillar Inc.'s Deposit Account No. 03-1129.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "D. James Barnes", written over a horizontal line.

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